

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
10 February 2005 (10.02.2005)

PCT

(10) International Publication Number  
**WO 2005/013193 A3**

(51) International Patent Classification<sup>7</sup>: **G03B 21/00**,  
21/28, H04N 9/07, G02F 1/00, G02B 5/04

(74) Agents: **EITAN, PEARL, LATZER & CO-  
HEN-ZEDEK** et al.; 7 Shenkar Street, 46725 Herzlia (IL).

(21) International Application Number:  
PCT/IL2004/000711

(22) International Filing Date: 3 August 2004 (03.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/491,965 4 August 2003 (04.08.2003) US

(71) Applicant (for all designated States except US): **GENOA  
COLOR TECHNOLOGIES LTD.** [IL/IL]; P. O. Box  
12209, 46733 Herzliya (IL).

(72) Inventor; and

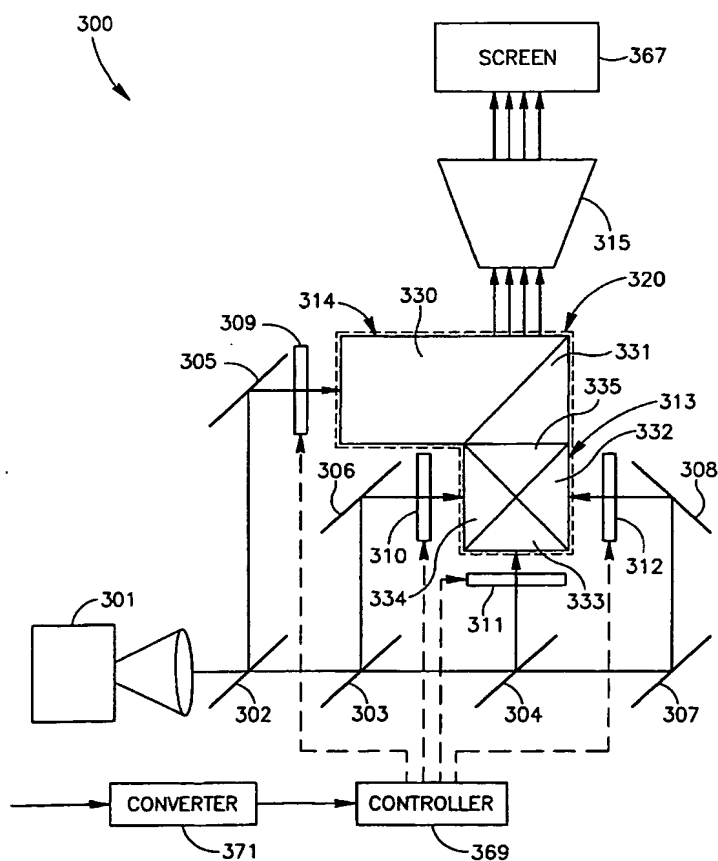
(75) Inventor/Applicant (for US only): **ROTH, Shmuel**  
[IL/IL]; 7 Zelig Bas Street, 49550 Petach Tikva (IL).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,

[Continued on next page]

(54) Title: MULTI-PRIMARY COLOR DISPLAY



(57) Abstract: A device (300) to produce a color image using four or more primary colors. The device may include four or more transmissive spatial light modulators ( 309, 310, 311, 312 ) to modulate four or more, respective, light beams in accordance with four or more, respective, primary color image components of the color image to produce four or more, respective, modulated light beams. The device may also include a beam combining arrangement (320) to combine the four or more modulated light beams into a combined light beam carrying the color image.



SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

**(88) Date of publication of the international search report:**  
1 September 2005